

Appl. Serial No. 10/621,803

Response dated Apr. 29, 2005

Reply to Office Action of Mar. 16, 2005

AMENDMENTS TO THE CLAIMS

The following Listing of Claims will replace all prior versions and Listings of Claims in the Application.

Listing of Claims:

1. (Currently Amended) A device for amplifying and detecting a target nucleic acid, comprising:

a solid support having a surface;

at least one species of oligonucleotide primer immobilized substantially uniformly over said surface, thereby defining a field of immobilized ~~oligonucleotides~~ primers, said at least one species of oligonucleotide primer being comprising a sequence complementary to a first strand of said target nucleic acid; and

a plurality of samples of labeled hybridization probes immobilized in an array to the solid support ~~at discrete positions~~ within said field of immobilized ~~oligonucleotides~~ primers,

at least one of the labeled hybridization probes immobilized in said array comprising a sequence complementary to an amplicon synthesized using a primer from said field of immobilized primers and said target nucleic acid as a template in a nucleic acid amplification reaction.

each of said plurality of samples of labeled hybridization probes in said array being spatially separated from the others, but not spatially separated from said field of immobilized primers, and

each of said plurality of samples of labeled hybridization probes comprising a detectable label prior to contacting said device with any nucleotide polymerizing enzyme.

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2. **(Original)** The device of Claim 1, wherein said surface comprises a material selected from the group consisting of glass and plastic.

3. **(Currently Amended)** The device of Claim 2, wherein said at least one species of oligonucleotide primer immobilized uniformly over said surface is immobilized covalently.

4. **(Currently Amended)** The device of Claim 2, wherein said plurality of samples of labeled hybridization probes ~~immobilized to the solid support~~ are immobilized covalently.

5. **(Currently Amended)** The device of Claim 2, wherein said at least one species of oligonucleotide primer and said plurality of samples of labeled hybridization probes are immobilized covalently.

6. **(Currently Amended)** The device of Claim 5, further comprising at least one soluble oligonucleotide primer complementary to an opposite strand of said target nucleic acid, said first strand and said opposite strand of said target nucleic acid being complementary to each other.

7. **(Currently Amended)** The device of Claim 1, wherein said plurality of samples of labeled hybridization probes comprises a plurality of self-reporting probes.

8. **(Original)** The device of Claim 7, wherein each of said plurality of self-reporting probes comprises a fluorophore moiety.

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9. **(Currently Amended)** The device of Claim 6, wherein said at least one species of oligonucleotide primer immobilized uniformly over said surface comprises a promoter sequence for an RNA polymerase.

10-18. **(Canceled)**

19. **(Original)** A kit for detecting a target nucleic acid, comprising:
a device in accordance with Claim 1;
a soluble oligonucleotide primer; and
a positive-control nucleic acid amplifiable in a nucleic acid amplification reaction using said at least one species of oligonucleotide primer immobilized uniformly over said surface in combination with said soluble oligonucleotide primer.

20-31. **(Canceled)**